



# ARAT Bulletin



*"Serving the Army Reprogramming Community Since 1994"*

Volume 4, Issue 2

September 1997

## *Forward Looking Leadership- Targeting Year 2000 (and Beyond)*



### *ARAT Decision Makers Conduct In Process Review*

**The** senior leadership of the ARAT Project held an In Process Review (IPR) on 23 June at the Land Information Warfare Activity (LIWA), Fort Belvoir, VA. The purpose of the IPR was to provide the current status of key ARAT initiatives to Mr. Rick Simon, the coordinator of ARAT activities at Headquarters, Department of the Army (DAMO-FDI), and other members of the ARAT decision making community.

The IPR opened with Mr. Joseph Ingrao, ARAT Project Officer, providing a review of the history of Army reprogramming efforts. He continued by presenting the ARAT Project Objectives that focus on the fundamental principle of:

*All (project) efforts will insure a rapid reprogramming capability is embedded within Army doctrine and force structure to support current and future weapons systems.*

Mr. Ingrao concluded his portion of the IPR by highlighting ARAT accomplishments, current activities, and future efforts in the areas of:

- Identifying, establishing and supporting ARAT infrastructure sites
- Developing and sustaining ARAT process documentation and plans
- Developing and sustaining a Rapid Reprogramming Communications Capability *(cont. p. 3)*

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## *From the Project Officer's Desk*

*Written by Mr. Joseph Ingrao, ARAT Project Officer*

[JS1]



### *One of the Pillars of ARAT: Training!*

I have every confidence that the greatest asset the Army has does not reside in its tanks, weapons, communication systems, or engineering centers, but the competence of the men and women who serve in it. The U.S. Army has always remained strong because of the skill of the people who serve. Individual and unit competence is the great force multiplier that makes our Army more capable than any other.

To heighten awareness and the skill level of the Army community in regard to Rapid Reprogramming, the ARAT has been providing, and will continue to provide, training to U.S. Army units. I have seen the ARAT training foster a new level of understanding of rapid reprogramming for Army Target Sensing Systems (ATSS), and improved communications among the reprogramming managers, threat analysts, EWO's, CECOM LAR's and intelligence analysts. The ARAT places a high priority on training and is committed to providing our Warfighters with the training needed to update their ATSS. Our ultimate goal is to provide Warfighters with the capability to install mission and target identification software at the lowest possible level to provide maximum flexibility for their commanders. In the new Fiscal Year, the ARAT is going to expand its training with the development of CD-ROM and videotape training. If you or your organization is interested in receiving ARAT training for the Rapid Reprogramming of your Target Sensing Systems, please contact the ARAT Project Office. Remember, Training that leads to increased competence is a Force Multiplier !!



*Recently the ARAT had the opportunity to brief and train the Commanders and Soldiers located at Ft. Hood from the 1st Cavalry Div., 4<sup>th</sup> Infantry Div., 1st Aviation Training BDE, 21st Cavalry BDE., 13th COSCOM, III Corps HQ, HHS 15th MI BN, 507th MED Company, HHC 4th BDE 1st Cav., 615th ASB, and CECOM LAR's. The training focused on the rapid reprogramming principles and procedures for the AN/APR-39A(V)1 Radar Warning Receiver.*

## ***ARAT Leadership Conducts IPR (cont.)***

- Developing and sustaining a Rapid Reprogramming Distribution Capability
- Developing and implementing Flagging Models
- Supporting Rapid Reprogramming exercise and demonstration activities
- Providing ARAT awareness, readiness, training and tools

Mr. Norman Svarrer, Deputy Chief of the ARAT-TA, followed Mr. Ingrao and provided a comprehensive overview of the ARAT-TA's background, performance, accomplishments, and future event schedules. He outlined the seven ATSS currently supported by the ARAT-TA, as well as the 17 regional Mission Data Sets (MDS) (both U.S. and Foreign Military Sales-oriented) which the ARAT-TA sustains on a routine basis.

Mr. Svarrer also explained how the ARAT-TA reacts to threats posed by changes in emitter signatures. He focused on the processes and usage of the System Impact Message and the

Reprogramming Impact Message to "get the word to the field" and to support the actual fielding of changes to MDS. As his conclusion, Mr. Svarrer presented an assessment of the benefits (outlined below) provided by the ARAT process.

CW2 Matt Merryman, ASE Training System Manager from the Aviation Center's DOTDS, was the next presenter and provided information on the project from the perspective of the ARAT-SC at Fort Rucker. He outlined the support the ARAT has provided to Aviation units deployed to Bosnia and emphasized the criticality the ARAT infrastructure plays supporting the Warfighter. CW2 Merryman concluded by outlining the role the ARAT currently plays as a supporting component to the ASET-IIA Virtual ASE Trainer. He also emphasized the potential benefits to be gained from the ASET/ARAT combination to include positive impacts on training, logistics, mission planning, and information flow.

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### **ARAT Process Benefits**

#### **• Cost Savings**

- Unit level reprogramming is cheaper than sending contact teams worldwide each time a change is needed.
- ARAT efforts towards standardization and common infrastructure reduce reprogramming costs.

#### **• Time Savings**

- Unit level reprogramming is faster than contact team delivery (from weeks in 1991 to hours in 1997).
- Process time requirements are dramatically improved; Warfighters get support in operational time frames.

#### **• Data Accuracy Improvement**

- Electronic data processing, integrated on-line analysis, and automated reprogramming reduces data entry error.
- Improved mission/survivability/fratricide reduction/target enhancement.

#### **• Infrastructure Support Validation**

- Ongoing demonstration and validation of reprogramming capability in Army and Joint exercises.
- Battlefield Sustainment of fielded systems.



## **ARAT IPR (cont.)**

Following CW2 Merryman was CW5 Sam Oliver, Tactical Operations Officer, 4<sup>th</sup> Brigade, 1<sup>st</sup> Cavalry Division. In his presentation entitled “A View From the Field”, CW5 Oliver explained the benefits that the ARAT provides to such activities as Intelligence Preparation of the Battlefield, Airspace Coordination, Operator and Maintainer Training, and the reprogramming of ASE. CW5 Oliver’s insight as a customer of ARAT services added a special perspective to the IPR in that he gave the audience a first hand account of what the project has provided to the Aviation community.

The second portion of the IPR focused on the efforts of the contractors from SRI and Ilex Systems who support the ARAT-PO on a daily basis. Areas that were addressed in this portion included the ARAT Communications Infrastructure, Memory Loader Verifier Development, Aviation Mission Planning System, the EWO Support Software, Exercise Activities, the “ARAT Bulletin”,

and Rapid Reprogramming and Technical Awareness Training. These presentations focused on past accomplishments, as well as current and future initiatives in support of the Warfighter.

The IPR was not limited to informational presentations. Attendees raised several key issues that Mr. Simon assigned as “Action Items” for future investigation and activity. These items included ARAT/LIWA participation in the upcoming “Division XXI Army Warfighter Exercise”, a review and revision of the current *CECOM Charter for the ARAT-PO*, Measurement and Signature Intelligence (MASINT) requirements in support of ATSS reprogramming, establishment and maintenance of a “Blue” signatures database, and a future “ATSS Users” meeting to address pertinent issues. In retrospect, this IPR served its purpose fully in the sense that not only were key ARAT decision-makers informed of project developments, but also pertinent issues, needing to be addressed, were identified for action.

## **Flagging Model Update**

“Flagging models are the ‘front-end’ of the rapid reprogramming process, encompassing the day to day operations of near real-time intelligence screening and analysis to identify threat changes theater by theater. ARAT-PO supports the development and operation of automated flagging models that compare intelligence collection reports against computer system and MDS programming models of fielded TSS. This comparison occurs on a round-the-clock basis, reporting possible changes in the threat environment that may require reconfiguration of TSS software. Flagging models allow tens of thousands of comparisons to take place daily for every TSS and associated MDS, freeing analysis personnel for detailed examination of exception reports.” (*ATSS Rapid Reprogramming Project Plan*)

**The** task of turning flagging reports into an updated Mission Data Set (MDS) can be an arduous one. The process of analyzing the flagged signals,

those that fall outside the EW system programmed limits, occurs in multiple phases. First, the threat analyst reviews dozens of parameters and determines how frequently these signals occur, where the signals were collected, how a change to the mission data set interferes with other programmed emitters, as well as a host of other considerations.

Paramount to this process is the threat analyst’s ability to manipulate a substantial amount of data. Presently, this is not an easy task. The flagging reports received by the ARAT-TA at Eglin AFB, FL, are hard copies of messages sent from the ARAT flagging shop at Kelly AFB, TX. A pile of paper is not the best method to manipulate data.

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## *Flagging Models (cont.)*

The process is improving as the ARAT-TA develops a comprehensive flagging data management system. In conjunction with the Air Force, Army flags are now loaded into the Conventional Flagging Database (CFDB), developed last year. The CFDB is the first step in being able to manipulate flagging data dynamically.

The CFDB was the first building block of the flagging data management system. Prior to its development, flagging data was stored until the time the flagging reports were transmitted as messages. After sending, the messages were the only record of a flagged signal. The completion of the CFDB last year changed that. As the flags are reviewed each day, the database, which contains several important clusters of information, is populated.

Although the CFDB is the heart of the flagging data management system, accessing the data is difficult unless the user is familiar with Structured Query Language (SQL) and the structure of the database. Since most users are not familiar with these two items, the ARAT-TA decided to develop a Graphical User Interface (GUI) to simplify the task and to serve as a data manipulation tool for mission data analysis. The GUI is being developed to use point-and-click buttons and pull-down windows, as much as possible, to reduce the amount of information the user must recall to complete their query. In addition to the GUI, the CFDB will have a robust data manipulation capability which is important to threat analysts. (Analysts frequently cross reference signals with several mission data sets and individual parameters with various dates and locations in their analyses.)

Current plans are for the ARAT to field the GUI quickly to provide user access to the CFDB. (As improvements are made in response to user requirements, new versions will be fielded periodically.) When completed, it will allow threat analysts to review the flagging data easily and

rapidly, and put a new MDS out to the field more quickly and efficiently. This means soldiers in the field can adapt to a threat change faster than they could before.

The final part of the flagging data management system is the means of distributing the CFDB to the users. The present method of distribution is to periodically send out updates to current copies of the CFDB at the users' location. This is not an optimum distribution method because the data is only as current as the last update, and the problem of configuration control adds to the potential for variations between the master database and those in the field. Plans are being developed to maintain a single database, at the flagging shop, that users can access via the SIPRNET. This eliminates the shortfalls of the current method and gives threat analysts access to data that is approximately 48 hours old in peacetime conditions, less during operations.

The information within the database itself is comprised of three sections. The parameters of a signal that the model flagged constitute the first section. Ideally, a collector would collect all of the parameters needed for proper analysis. In the instances where the signal collector does not determine nor report all significant parameters, expert system software will fill in the missing parameters with nominal values, allowing the signal to be processed by the flagging model. The CFDB then stores these "filled" values to permit additional analysis at ARAT-TA, Eglin AFB.

The "flags" themselves comprise another section in the database. If a signal causes an ATSS to misidentify the emitter, the flagging model will specify what symbol would be displayed, the programmed parameters that were matched, and some processed signal values. These values are stored separately from the signal data, but are referenced to the signal for database queries.

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## Flagging Models (cont.)

The reason the signals and the flags are separate is that one unusual signal can create flags in several mission data sets or EW systems. The signal is stored only once, but can be tied to several flags.

The last major pieces of information contained in the database are the specifics of the individual intercepts of the signals. This information includes the date, time, location, and collector of the signal. The intercepts are referenced to the signals since a particular signal may be collected at several locations at different times. This information comprises a complete record of the analysis of the flagging models. It is the information the threat analysts need to insure that Army mission data sets identify threats correctly.

Within the past two years, the ARAT added the capability of flagging to its mission data maintenance process. That capability has had a remarkable effect on the ARAT-TA's performance in exercises and operations. The addition of a

flagging data management system promises further improvements in the timeliness of new mission data sets reaching the battlefield. The soldier in the field will get the tools to do their job in time to accomplish the mission.

*Written by Mr. Carl Brunner, SRI, Inc., Kelly AFB.*

## Want to Learn More?

**This** article is an update to a series of past flagging features including:

- "Flagging (Part 1)"- July 1994
- "Flagging (Part 2)"- April 1995
- "Army Electronic Warfare Flagging Support Established"- January 1996

The first two articles are available to **.gov** and **.mil** Internet users on the unclassified ARAT web site. The third article and the remainder of the January 1996 edition of the "ARAT Bulletin" will be placed on-line in the near future. See page 8 for additional details.

## ARAT Web: What's Happening?

**You** may have noticed some pages are beginning to look different. This is because of efforts both to make page layouts easier to follow, and to add some of the information that you, the users, have been asking for.

We will be adding a footer to the bottom of the pages, which will allow a user to get from any page (that the user is at) back to a main web page. This will help a user to navigate the web quickly and easily. Many may have noticed that the search engine is not working. Efforts are being made to upgrade this feature and have it available to you as soon as possible. We are also working to finish putting all of the past issues of the ARAT Bulletin in HTML format so that they are available to you for reference at any time.

As always we here at ARAT appreciate your feedback and patience with the redesign of the web. Please send any suggestions or comments to: [mcdemarest@sesd.ilex.com](mailto:mcdemarest@sesd.ilex.com). *Written by Mr. Marc Demarest, Ilex Systems, Inc.*



### Calling Fort Monmouth? Eglin AFB?

The Area Code for Fort Monmouth (affecting the ARAT-PO and ARAT-SE) is in the process of changing to **732**. The Area Code for Eglin AFB (ARAT-TA) is in the process of changing to **850**. Current Area Codes can still be used until early December 1997.

## ***ARAT Project Support for the Army Aviation Mission Planning System (AMPS) (Part One of a Two Part Series)***

**The** Army Aviation Mission Planning System (AMPS) is currently in development for use by Army aviation units and selected Foreign Military Sales (FMS) nations. Initial development is directed to providing mission planning and avionics configuration automation for AH-64D Longbow and OH-58D Kiowa Warrior aircraft.

Soon, however, many Army rotary aircraft will have AMPS for tactical mission planning and operations. AMPS addresses the extensive data entry requirements needed to initialize navigation, communications, weapons system, and other platform avionics. AMPS automates this process, building and loading required data into a Data Transfer System (DTS) as aircrews plan their missions. Once mission planning is completed, the crew loads a Data Transfer Device (DTD), or Data Transfer Cartridge (DTC), from the AMPS and carries it to the aircraft to initialize avionics in minutes once power is applied.

Mission planning using AMPS gives rotary aircraft crews an automated ability to plan and prepare for missions that has not been previously available. AMPS plays a crucial role in reducing aircraft mission turnaround time by automating the aircraft electronic data initialization tasks on integrated platforms such as the Apache Longbow, Kiowa Warrior, and Comanche. In addition to digital information, AMPS also produces kneeboard cards, maps, and other information that is tailored to the mission. AMPS also will furnish connectivity to maneuver command and control systems to provide aircrews with access to current intelligence, command and control information, and other data.

With the introduction of AMPS, Army Aviation units down to the company/troop level will have an organic computer system connected to Army command and control networks. This

connectivity will allow unit Electronic Warfare Officers (EWO) to acquire and manage Target Sensing System (TSS) Mission Data Sets (MDS) as part of the mission planning process. In the past, TSS MDS loading has been, by necessity, relatively static, using regionalized data. At the unit-level, however, AMPS will allow TSS MDS to be selected on a mission-by-mission basis, if required, or to be selected by the unit EWO, based on unit mission and/or area of operation.

### ***ARAT Role in AMPS MDS Support***

The ARAT project is currently providing assistance to both the AMPS program and TSS developers (AN/ALQ-211 SIRFC, AN/APR-48, etc.) to ensure that each software programmable Aviation TSS will be supported by AMPS (Figure 1 on Page 9). The ARAT is currently providing assistance for a variety of tasks, including:

- Liaison between TSS development programs and the AMPS developer for planning and programmatic information on new TSS.
- Assistance with the development of AMPS release to ensure AMPS supports TSS during operational trials and at fielding.
- Hardware and software design and interface development for MDS loading functions.
- Development of EWO Support Software (EWOSS) (see page 9) TSS MDS management and transfer software.

The ARAT project works with TSS developers to ensure that new systems are fully supported when fielded to operational units. CECOM Night Vision/Electro-Optic Systems Directorate (NVESD) and Army Missile Command (MICOM) are the lead activities for most Army Aviation avionics and TSS development programs.

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## AMPS (cont.)

When new systems enter advanced development, or are selected for acquisition (COTS/Non-Developmental Item [NDI]), ARAT assists TSS PM's with identification of operational support requirements for TSS. These requirements include:

- Evaluation of MDS threat data parameters to ensure that they are included in current collection programs, or will be included when the system is fielded.
- Definition of MDS threat monitoring requirements to ensure that TSS have appropriate flagging and analysis processes/tools in place at the Army Land Warfare Information Activity (LIWA) ARAT-Threat Analysis activity (ARAT-TA) when the system is fielded.
- Evaluation of MDS software programming environment and response time, provided either by the government or by a government-contractor team, to ensure that it is available and can provide software in time to meet Army and operational unit requirements.
- Software design and interface development for DTS and MLV loading of TSS.

- Ensuring that MDS data loading hardware, software, and procedures are fielded with the TSS down to the company/aircraft level as appropriate.
- Ensuring AMPS software support services are developed to support the TSS MDS selection and loading functions necessary for unit-level operation.

These efforts typically start 24-48 months before system operational evaluation to ensure that a support environment is functioning at the evaluation. AMPS requires at least an 18-month lead-time to accommodate new support requirements into its release schedule. This can be shortened to 6-12 months if only minor modifications are required for existing TSS support features. MLV-supported TSS can typically be provided minimum essential AMPS services within a 12-month development period using the ARAT project EWOSS software. Since EWOSS software development is controlled by the ARAT project, developers have a direct path to provide basic MDS access and loading functions down to the company level as long as hardware modifications are not required to the AMPS system.

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**The ARAT-PO has received numerous telephone calls requesting back issues of the "ARAT Bulletin". Because earlier editions were printed in limited quantities, few original issues remain.**

**For your convenience, the following issues of the "ARAT Bulletin" are available on the ARAT Web Site at [www.arat.iew.sed.monmouth.army.mil](http://www.arat.iew.sed.monmouth.army.mil) (unclassified) or [www.arat.army.smil.mil](http://www.arat.army.smil.mil) (SIPRNET):**

<b>April 1994</b>	<b>April 1995</b>	<b>April 1996</b>
<b>July 1994</b>	<b>July 1995</b>	<b>February 1997</b>
<b>October 1994</b>	<b>October 1995</b>	

**Look for additional issues to be added in the upcoming months.**





## AMPS (cont.)

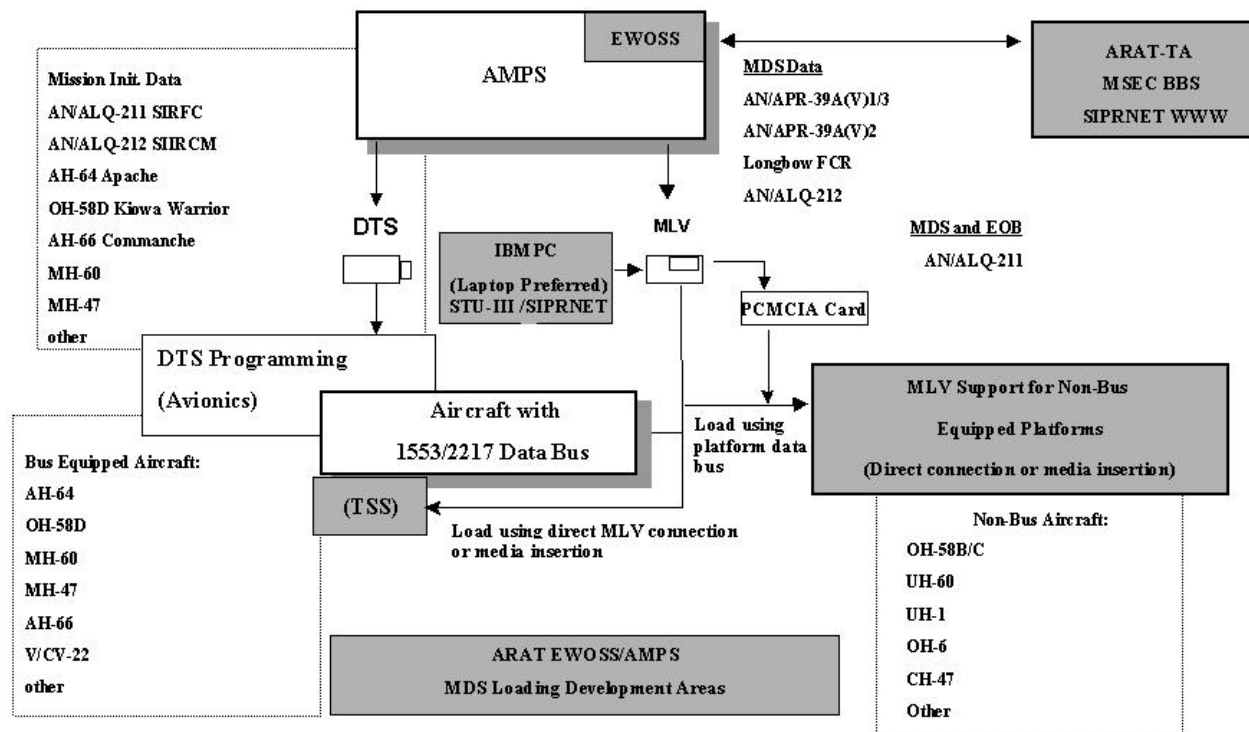


Figure 1: AMPS TSS MDS support concept using ARAT EWOSS Software.

For TSS that want to use the DTS for MDS programming, at least 24 months is required to coordinate the new DTS memory allocation map and allow testing across all platforms affected by the change. DTS memory allocation uses exacting interface and formatting requirements that have to be coordinated with several different contractors as well as platform PMs. Testing must also occur at several locations in addition to the integrated test environment maintained by NVESD.

### ARAT EWOSS Software

The ARAT project is developing an MDS access and management software application, based on the Windows 95/NT operating systems, known as the EWO Support Software (EWOSS). The

EWOSS uses the AMPS system to enable unit-level EWOs to request and receive ARAT support wherever adequate communications exist. With the introduction of EWOSS, EWOs will be able to select from the large number of MDS now available to get the most capable mission load for the expected threat. This allows Army aviators to select and use the best data set based on mission parameters, the area of operations, known threats, or other criteria.

The AMPS platform was chosen, from several possible candidates, as the most logical host for EWOSS. The primary advantage to using

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## **AMPS (cont.)**

AMPS is its role to support both aircrew and aviation staff functions from brigade down to company level as shown in the chart below.

The EWOSS software will allow units to exploit the large number of ARAT data connection options including low-to-medium speed STU-III modem (DSN or commercial) and high-speed Internet, Milnet, and SIPRNET/Intel Link. AMPS, and the data distribution network associated with it, will be used to store and forward TSS MDS updates down to the unit-level. Units can also use the network or modem connections to request services or download TSS-oriented intelligence summaries and MDS data. To support units operating in remote locations, higher headquarters can download MDS data and transmit over local tactical radio nets or copy data to media such as floppy disks and distribute them by courier. EWOSS includes functions to:

- Access and interact with the ARAT classified and unclassified WWW pages.
- Access and interact with the MSECBS.
- Download MDSs and threat analysis summaries from WWW pages and BBS.
- Manage MDSs on local AMPS systems including copying, storing, forwarding, and deleting files.

- View and print MDS kneeboard and threat description files.
- Select and recommend MDSs based on comparison of the AMPS threat database against MDS contents.

The EWOSS will support MDS downloading, storage, selection and data transfer for all Army aviation TSS that are programmed using MLVs, AMPS/IBM PC compatible removable storage media (3.5" diskette, PC Card flash memory/hard drive, Magneto Optical Disk, etc.), or DTS. For systems programmed by MLV, MDS and threat laydown data are loaded to the MLV, which is connected to the AMPS using either an RS-232 port or MIL-STD-1553B connection. Removable media is inserted into the AMPS and files are transferred using the EWOSS interface. Currently, no TSS is programmed using the DTS, and no DTS programming is planned for future systems. New TSS such as the AN/ALQ-211 Suite of Integrate RF Countermeasures (SIRFC) will have mission data loaded using PC cards inserted either into the AMPS or an MLV.

*Written by Mr. Jim Holland, SRI, Inc.*

*(Part Two of this article will appear in the next issue of the "ARAT Bulletin")*

<b>AMPS SUPPORT AT VARIOUS ECHELONS</b>	
<b>FORCE LEVEL</b>	<b>AMPS FUNCTION</b>
<b>Brigade/ Regiment</b>	<b>Operations planning, air tasking order (ATO) breakout, ATO planning, MDS support functions.</b>
<b>Battalion/ Squadron</b>	<b>Operations planning, MDS support functions.</b>
<b>Company/ Troop</b>	<b>Mission planning, aircraft DTS loading, MDS selection, MLV loading</b>

## *ARAT-PO Supports Guardrail Symposium*



*The ARAT Information Display at the AOC Guardrail Symposium*

**The** Association of Old Crows conducted a Guardrail Symposium and Technical Exhibition on 25 June in Eatontown, NJ. Centering on the theme “GUARDRAIL, A Generation Ahead”, the event not only celebrated the 25<sup>th</sup> Anniversary of the Airborne Collection Platform and but also featured guest speakers from the Airborne SIGINT Operations community.

Amid the exhibits presented by the government and industry agencies that support GUARDRAIL, the ARAT-PO provided a demonstration of its capabilities in support of the Warfighter. The display featured connectivity to the MultiService Electronic Combat (ARAT) Web site as well as informational literature, copies of the “ARAT Bulletin”, and a table top display outlining the history and capabilities of the ARAT.

The ARAT-PO salutes the GUARDRAIL team on their accomplishments and dedication to our national defense over the past quarter century. As the future will continue to see the advanced development of aerial collection platforms, the ARAT stands ready to support this vital capability in the national intelligence arsenal.

*“Introduced under the auspices of NSA and then managed by the Army, the GUARDRAIL System has proven itself as a successful and significant tactical and national asset providing continuous surveillance capability over these many years, adapting to the consistent evolutionary changes in technology, and always rising to meet the challenge of the changing threat scenario. The GUARDRAIL System has continually demonstrated its staying power and universal position as a force multiplier through the years of changes in cost, schedule and force constraints.”*

*- Introduction to GUARDRAIL Symposium Brochure*



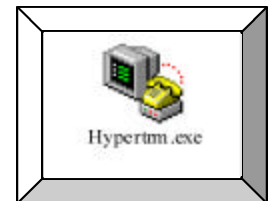
## Notes to the Field

### How to configure a Windows 95 PC to connect to the MSECBBBS via STU-III

**This** article is for Microsoft (MS) Windows 95 (Win95) Operating System (OS) PC users desiring to utilize the HyperTerminal software program to connect to the Multi-Service Electronic Combat Bulletin Board System (MSECBBBS) via Secure Telephone Unit (STU-III).

To begin the configuration:

- Click the “*Start*” button in the lower left-hand corner of the desktop screen.
- Click “*Programs*”.
- Click “*Windows Explorer*”.
- Create a “*download*” directory (for downloading required MSECBBBS files) by clicking a specific drive or existing directory. The chosen drive or directory will be highlighted.
- On the top menu bar, click “*File*”
- Click “*New*”
- Click “*Folder*”.
- Type “**download**” in the newly created box in the right side window. Press the *Return* (or *Enter*) key on your keyboard.
- Close “*Windows Explorer*” by clicking the “*X*” button in the upper right hand corner of the window.
- Click the “*Start*” button in the lower left-hand corner of the desktop screen.
- Click “*Programs*”.
- Click “*Accessories*”.
- Click the folder marked “*HyperTerminal*”.
- A window entitled “*HyperTerminal*” appears. Double click the icon labeled “*Hypertrm*” or “*Hypertrm.exe*” (see example at right).



*A window appears indicating that you need to install a modem before you can make a connection. Since you will be dialing manually, click the “No” button in response to the question of whether you want to install one now. A window entitled “Connection Description” appears.*

- In the window labeled “*Name*”, enter “**MSECBBBS**”.
- Choose an icon.
- Click the “*OK*” button.

*A window entitled “Phone Number” appears. All fields, except the last one labeled “Connect Using:” will be “grayed out”.*

- Change “*Connect Using*” to read “*Direct to Com 2*” using the pull-down menu arrow button on the right end of the box.
- Click the “*OK*” button.

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## How to configure a Windows 95 PC to connect to the MSECBBBS via STU-III (cont.)

### *A window entitled "COM2 Properties" appears.*

- Change "*Bits per second*" to match your STU-III rate using the pull-down menu arrow button on the right end of the box. (If you are using a 2400 bps STU, then no change needs to be made.)
- Ensure that the following configuration is set:
  - "*Data bits*" should be "8"
  - "*Parity*" should be "None"
  - "*Stop bits*" should be "1"
  - "*Flow Control*" to read "*Hardware*" (Change by using the pull-down menu arrow button)
- Click the "OK" button.
- Click the "Receive" button up on the Toolbar. (It is the next to last button with a small red arrow in it facing downward. When you put the cursor on the button, a small window stating "Receive" should appear briefly.)

### *A window entitled "Receive File" appears.*

- Click the "Browse..." button to the right of the "*Place received file in the following folder*" box.
- Locate the "download" directory that you created earlier.
- Double click the "download" folder.
- Click the "OK" button.

### *The "download" folder should now appear in the box entitled "Place received file in the following folder".*

- Ensure "Zmodem" is listed under "*Use receiving protocol*".
- Click the "Close" button.

To connect to the MSECBBBS, follow the procedures outlined in the MSECBBBS User's Guide. If you do not have this document, contact the MSECBBBS admin staff at DSN 872-2166/Comm. (904) 882-2166. A short synopsis follows:

- Connect the computer's COM2 port to the STU-III's RS-232 port with a RS-232 cable.
- Insert the Crypto Ignition Key (CIK) into the STU-III and turn.
- Manually dial the STU-III (Army):
  - Toll-free: 1-800-895-0604 DSN: 875-1806

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### **ATTENTION EWIR DATABASE USERS!**

The EWIRDB POC at the National Ground Intelligence Center is now Mr. Ken Holet. He can be contacted at:

National Ground Intelligence Center  
ATTN: IANG-SRA (Mr. Kenneth Holet)  
220 Seventh Street, NE  
Charlottesville, VA 22902

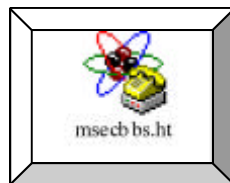
kmholet@ngic.osis.gov  
kmholet @ngic.ic.gov  
DSN 934-7559  
Comm. (804) 980-7559

## How to configure a Windows 95 PC to connect to the MSECBBBS via STU-III (cont.)

*The MSECBBBS login page automatically appears on the screen when the STU's complete their secure data connection.*

After logging out of the MSECBBBS:

- Close the “HyperTerminal” application by clicking on the “X” button in the upper right-hand corner of the window. *(You will be prompted to save the settings for the MSECBBBS session.)*
- Click the “Yes” button. A new icon labeled “MSECBBBS” (or “MSECBBBS.ht”) will appear in the “HyperTerminal” window (see example below). You may have to scroll down to see it.



- Click and hold the mouse button on the “MSECBBBS” icon, and drag it onto the desktop. In the future, when connecting to the MSECBBBS, simply double click this desktop icon.
- Close the “HyperTerminal” window by clicking on the “X” button in the upper right-hand corner of the window.

If you encounter any problems while attempting to execute the above procedures, do not hesitate to call the ARAT R<sup>2</sup>CIL for assistance.

*Written by Mr. Andrew Lombardo, Ilex Systems, Inc.*

The ARAT Rapid Reprogramming Communications Infrastructure Laboratory			
Telephone:	#1	(732) 532-9395	DSN: 992-9395
	#2	(732) 532-9329	DSN: 992-9329
	#3	(732) 532-6003	DSN: 992-6003
	#4	(732) 427-6000	DSN: 987-6000*
	Or	(732) 530-7766 ext.: 317* or 387*	
* Answering machine/voice mail option available at this number for after-hour messages			
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SIPRNET:	<a href="mailto:webmaster@arat.army.smil.mil">webmaster@arat.army.smil.mil</a>		
Fax Number (ARAT PO):	(732) 532-5238	DSN: 992-5238	
(Note: Some regions of the country do not yet recognize the 732 Area Code. If you encounter this problem, use 908 instead.)			



## For Your Information

### Coming Events

<b>AUSA Annual Meeting</b>	Washington, DC	13-15 October 1997
<b>AOC International EW Technical Symposium and Convention</b>	Washington, DC	26-30 October 1997

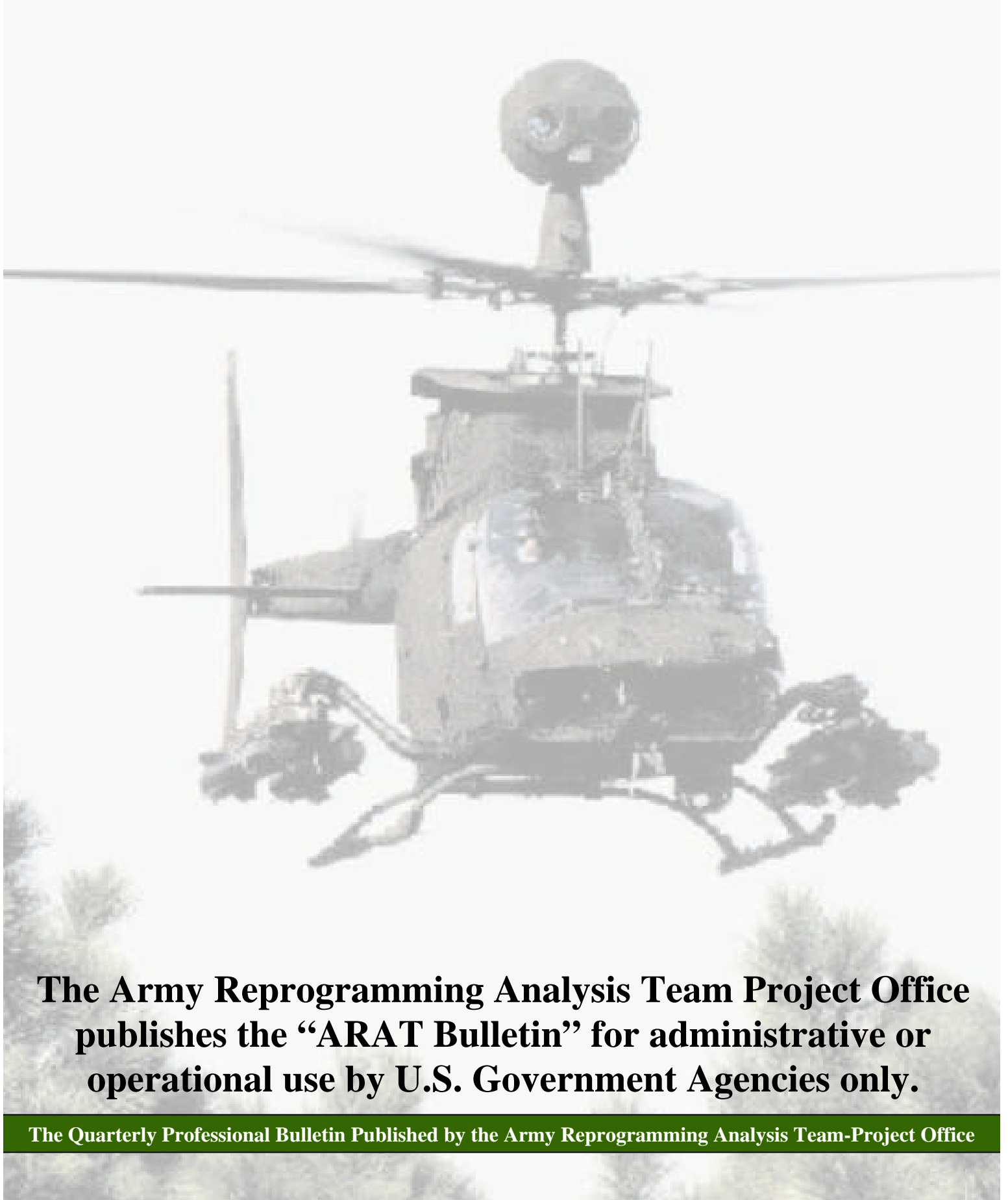
### The ARAT Community Key Points of Contact

HQDA, DAMO-FDI	Mr. Rick Simon	DSN: 227-6527 FAX: 223-5336
HQ, TRADOC	Mr. Bob Miner <a href="mailto:minerr@emh10.monroe.army.mil">minerr@emh10.monroe.army.mil</a>	DSN: 680-2664 FAX: 680-2947
HQ, INSCOM	COL Halbert Stevens	DSN: 235-1791 FAX: 656-1003
ARAT-PO	Mr. Joseph Ingrao <a href="mailto:ingrao@doim6.monmouth.army.mil">ingrao@doim6.monmouth.army.mil</a> Mr. Ken Kragh <a href="mailto:kragh@doim6.monmouth.army.mil">kragh@doim6.monmouth.army.mil</a>	DSN: 992-1337 FAX: 992-5238 DSN: 992-6003 FAX: 992-5238
ARAT-TA	LTC Karen McManus <a href="mailto:kemcman@vulcan.belvoir.army.mil">kemcman@vulcan.belvoir.army.mil</a> Mr. Norm Svarrer <a href="mailto:svarrer@wg53.eglin.af.mil">svarrer@wg53.eglin.af.mil</a>	DSN: 235-1036 FAX: 703-806-1003 DSN: 872-8899 FAX: 872-8213(C) /4268(U)
ARAT-SE (CECOM)	Mr. Jeff Boldridge <a href="mailto:boldridj@doim6.monmouth.army.mil">boldridj@doim6.monmouth.army.mil</a>	DSN: 992-8224 FAX: 992-8287
ARAT-SE (MICOM)	Mr. Gary Clayton <a href="mailto:clayton-rd-ba@redstone-emh2.army.mil">clayton-rd-ba@redstone-emh2.army.mil</a>	DSN: 746-0755 FAX: 746-0757
ARAT-SC (FT. BLISS)	Mr. Ernesto Martinez <a href="mailto:martinem@bliss-emh1.army.mil">martinem@bliss-emh1.army.mil</a>	DSN: 978-5595 FAX: 978-2773
ARAT-SC (FT. RUCKER)	Mr. George Hall <a href="mailto:hallg@rucker-emh3.army.mil">hallg@rucker-emh3.army.mil</a>	DSN: 558-9334 FAX: 558-1165
AFIWC (KELLY AFB) (Army Flagging)	Mr. Carl Brunner <a href="mailto:cbrunner@sdd.sri.com">cbrunner@sdd.sri.com</a>	DSN: 969-2021 FAX: (210) 977-2145

### The ARAT Bulletin Staff

<b>Editor-In-Chief</b> Mr. Joseph Ingrao, ARAT Project Office <b>Editors</b> Mr. Joseph Skarbowski, Ilex Systems, Inc. Mr. Samuel Johnson, Ilex Systems, Inc. <b>Distribution Manager</b> Ms. Diann McConnell, EPS, Inc.	Send comments, changes of address, and articles to:  Commander, USACECOM ATTN: AMSEL-RD-SE-SY-AI-ARAT Building 1210 Fort Monmouth, NJ 07712 FAX: 992-5238 (DSN); 732-532-5238 (Commercial)
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